## Evolution of the Sunset Valley Oregon System Layout Design and the Role Played by the LDSIG and OPSIG

Presented at the Extra 2011 West LDSIG/OPSIG Banquet

A key focal point in the presentation is the extensive impact that the LDSIG and OPSIG have played throughout the entire layout research, planning, design, construction and operational phases. The story of this evolutionary process makes for an ideal case study of a real-life example with measurable results.

The process started with a simple request for help in making minimal changes to the original SV to make it appear more prototypical. Five different prototypical scenarios were given serious consideration. However, SIG feedback came up with a sixth suggested route. After considerable study, that route was adopted to become the core for the final design.

With ever increasing SIG member involvement, my love for prototypical modeling grew. Soon the idea for simple modifications to the original SV was dropped entirely in favor of following a new and strictly prototypical design. Aspirations grew to the point where I knew that a whole new and much larger layout was going to be required. A layout requiring that a new home be designed and built to house the new railroad design requirements.

Then, as the actual layout design evolved, LDSIG and OPSIG as well as inputs from members of five different prototype Railroad Historical and Technical Societies resulted in major alterations to the design. Planned simple interchanges with different railroads, and their branches, soon grew to accurately modeling whole other railroads. Design standards were developed and soon it was discovered that to fit in the multi-railroad system that I now desired to model, required adding basement under a 2.5 car garage and then under a 3-season porch.

The extensive prototypical research has resulted in a 5-drawer file cabinet packed full of prototypical information being used to accurately model every station, industry, tunnel, bridge, trestle and the general overall railroad right-of-way. Over 250 prototypically based industrial structures are being created. In total 10 prototypical railroads and their interactions are being modeled all set in the Pacific Northwest in 1955.

Extensive operation research has resulted in a comprehensive data base being used to design highly realistic operations. The lessons learned from emulating prototypical operations, have resulted in making extensive layout and control system revisions. Most of these have been implemented since the SVOS articles were published in the February and March 2006 issues on Model Railroader, the 2006 issue of Model Railroad Planning and the March 2007 issue of Scale Rails. All the revisions will be in place for their grand opening at Grand Rails 2012.

The overall project is monumental with 38 crewmembers participating in the layout's construction and operation. The resulting layout occupies 2600 sq. feet with up to 4-decks. This evolutionary story covering its research, planning, design, construction and operation with major influential contributions provided by the LDSIG and OPSIG membership, coupled with extensive inputs from the membership of five prototype Railroad Historical and Technical Societies, makes for an extremely fascinating journey with lessons to be learned by everyone.

Presented by: Bruce Chubb, MMR California State Railroad Museum Sacramento, California July 8, 2011